



# **DEPARTMENT OF THE ARMY**

# JUSTIFICATION OF ESTIMATES FOR FISCAL YEAR 1983 SUBMITTED TO CONGRESS

FEBRUARY 1982



PART 3 OF 7 PARTS (WEAPONS & TRACKED COMBAT VEHICLES)

**PROCUREMENT** 

**PROGRAMS** 

AIRCRAFT

MISSILES

WEAPONS & TRACKED COMBAT VEHICLES

**AMMUNITION** 

OTHER

NATIONAL GUARD EQUIP

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Missiles, Weapons and Tracked Combat Vehicles, Amen	mition and Other Procurement.
Army Appropriations programs submitted by the Army	to Congress February 1982
for Fiscal Year 1983	
26. ABSTRACT (Continue on reverse olds if necessary and identity by block number)	
In justification of programs requested, this docume	ent, in separate volume for
each of the five Procurement Appropriations ? provid	ies backup data for the Army
	ries of Requirements. Program
Budget submission for FY 1983. Included are Summar	
Budget submission for FY 1983. Included are Summar and Financing Statements and Selected Data Sheets. declassified for NTIS distribution).	(This document has been

#### February 1982

# DEPARTMENT OF THE ARMY PROCUREMENT APPROPRIATIONS

### JUSTIFICATION OF ESTIMATES FOR FISCAL YEARS 1983, 1984

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#### DEPARTMENT OF THE ARMY

#### PROCUREMENT OF WEAPONS AND TRACKED COMBAT VEHICLES, ARMY

### JUSTIFICATION OF ESTIMATES FOR FISCAL YEARS 1983, 1984

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3-1 February 1982

## PROCUREMENT OF WEAPONS AND TRACKED COMBAT VEHICLES, ARMY

Section 1

Budget Appendix Extract

Language

Program and Financing Schedule
Object Classification Schedule

February 1982

#### APPROPRIATION LANGUAGE

For construction, procurement, production, and modification of weapons and tracked combat vehicles, equipment, including ordnance, spare parts, and accessories therefor, specialized equipment and training devices; expansion of public and private plants, including the land necessary therefor, without regard to section 4774, title 10, United States Code, for the foregoing purposes, and such lands and interest therein, may be acquired, and construction prosecuted thereon prior to approval of title as required by section 355, Revised Statutes, as amended; and procurement and installation of equipment, appliances, and machine tools in public and private plants; reserve plant and Government and contractor-owned equipment layaway; and other expenses necessary for the foregoing purposes: (\$4,002,300), \$5,030,685 to remain available for obligation until September 30, (1984), 1985.

#### EXPLANATION OF LANGUAGE CHANGES

- (1) To change the amount of appropriation for FY 1983.
- (2) To change the obligation expiration date for the FY 1983 program.

1 - 2 February 1982

#### Program and Financing (in thousands of dollars)

Identifi	cetion code 21-2033-0-1-051	Budget plan (amnts for procurement actions programod)			<b>G</b> bligations			
i	***************************************	1981 ectuel	1982 out.	1983 est.	1981 ectuel	1982 est.	1983 est.	
	gram by activities							
J	irect: 1. Tracked.combet vehicles 2. Weapons and other combet vehicles	3,071,556 302,645	3,215,285 661,015	4,200,729 829,946	2,848,288 277,466	3,120,471 609,225	4,061,120 779,318	
	Total direct Reimbursable program	9,374,200 664,330	3,876,300 713,600	5,030,665 611,100	9,125,754 690,062	3,729,696 728,395	4,840,436 625,328	
10.0001	Total	4,028,530	4,589,900	5,641,765	3,815,816	4,458,091	6,465,766	
11.0001 13.0001 14.0001 17.0001 21.4001 21.4002 24.4001 25.0001	inencing:  Offsetting collections from: Fodoral funds Trust funds Non-fodoral sources Recoveries of prior year obligations(-) Unobligated belance available, start of year: For completion of prior year budget plans Reprograming from or to prior year budget plan Unobligated balance available, end of year Unobligated balance lessing	-49, 243 -604, 960 -127 -25, 934	-116,700 -596,900	-125,100 -486,000	-47, 185 -516, 832 -131 -58, 731 -698, 084 	-116,700 -596,900 	-125,100 -485,000 -985,222	
39.0001	Budget authority	3,374,200	3,876,300	5,030,685	3,374,200	3,676,300	5,030,665	
40.0001 41.0001 42.0001 43.0001	udget authority: Appropriation Trensferred to other accounts(-) Transferred from other accounts Appropriation (adjusted)	3,378,200 -4,000	3,825,200 51,100 3,876,300	5,030,685	3,378,200 -4,000 	3,825,200 51,100 3,876,300	5,030,685  8,030,685	
71.0001 72.4001 74.4001 77.0001 78.0001	elation of obligations to outleys: Obligations incurred, net Obligated belance, start of year Chligated belance, end of year Adjustments in expired accounts Adjustments in unexpired accounts	,		, ,	3,251,668 2,192,226 -3,543,285 6,266 -58,731	3,744,491 3,543,265 -4,797,376	4,854,668 4,797,376 -6,176,741	
90.0001	Outleys		ij		1,848,144	2,490,400	3,475,300	

Army	Procurement of Wespons and Tracked Combat Vehicles, Army			04 FEB 42
	Object Classification (in thousands of dollars)			
identifi	lestion code 21-2033-0-1-051	1981 actuel	1982 est.	1983 est.
	Direct obligations:			
	Other services:	999,761	768,320	1,058,308
126.004	Other and recorded	468,366	715,620	634,985
131.001	Supplies and materials · Equipment	1,657,627	2,245,656	3, 147, 142
131.001	Edg i bingli s	*******	*******	******
199.001	Total direct obligations	3,125,754	3,729,696	4,840,436
	:	*********	********	*********
	Reimbursable obligations:			
. *	Other services:			
225.004	Oshor	203,006	270,236	148,646
226.001	Supplies and materials	150,617	162, 143	. 69,187
231.001	Equipment	336,350	296,014	367,496
	Total polyhypoship shillers less	690,062	720, 395	625, 329
298.001	Total reimbursable obligations	*********	********	, 425
998.901	Total obligations	3,815,816	4,458,091	6,465,765

•	_	-	

#### Procurement of Weepons and Tracked Combat Vehicles, Army

OS FER AS

	Program and	Financing (ir	thousands of	dollers)		1979 Fiacel :	yeer progress	
dentif	Cation code 21-2033-0-1-051		st plen (emour nt ections pro		Obligations			
•••••		1981 actual	1982 est.	1983 est.	1981 actual	1962 est.	1983 00%.	
Pro	grem by activities:			•				
0	Frect:  1. Trecked combet vehicles  2. Weepons and other combet vehicles	*********			46,168 5,917	********	*********	
. •	Total direct Reimbursable program				54,085 3,942			
10.0001	Total				58,027	••••••		
	'inancing: Offsetting collections from:				•			
11,0001 13,0001 14,0001	Adjustment to prior year federal fund orde Adjustment to prior year trust fund orders Adjustment to non-federal sources				60,608	*********	•••••	
17.0001	Recoveries of prior year obligations(-) Unobligated belance available, start of year:		• • • • • • • • • • • • • • • • • • • •	*********	-58,605		••••••••	
21.4001 21.4002	For completion of prior year budget plans Reprograming from or to prior year budget plan				-87,814		*********	
25.0001	Unebligated belance lapsing	25,934	******	**********	25, 934	••••••		

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#### Procurement of Weepons and Tracked Combat Vehicles, Army

OA FER A

	Program and	Financing (i	n thousands of	f dollars)		1980 Fiscal ;	eer program
dent f	ices ion code 21-2033-0-1-051		et plan (amous nt actions pro			Obligations	
		1961 actual	1982 est.	1983 est.	1981 actuel	1982 est.	1983 eet.
	ogram by activities:						
•	Direct: 1. Trecked combet vehicles	,	• • • • • • • • • • • • • • • • • • • •		191,491	105,961	
	2. Weepons end other combat vehicles				7,675	19,583	*********
	Total direct Reimbursable program		********		199,166 150,866	125,544 107,096	********
10.0001	Total	1111111111	*********		350,032	232,840	
1	Finencina:				•		
	Offsetting callections from:						
11.0001	Adjustment to prior year federal fund orde				407		*******
13.0001	Adjustment to prior year trust fund orders				27,320		
14.0001	Adjustment to non-federal sources				-3		•••••
17.0001	Recoveries of prior year obligations(-)	********			-126	*********	********
21.4001	Unobligated belance available, start of year			********	-610,270	-232,640	********
24.4001	Unobligated betance evaluable, and of year		********		232,640		
407, 0001	Budget authority						••••••

#### Progurement of Weepons and Tracked Combat Vehicles, Army

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frogram and	Financing (in	thousands of	dollers)		1961 Fiscal y	eer program
identification code 21-2033-0-1-081		et plan (amour nt actions pro			Obligations	
	1981 actuel	1982 061.	1983 est.	1981 ectuel	1982 est.	1983 00%,
Progrem by activities:	•					
Direct:						
<ol> <li>Trecked combet vehicles</li> <li>Weepons and other combet vehicles</li> </ol>	3,071,555 302,645	*********		2,608,629 263,874	217,212 14,559	245,714 24,218
	•••••••	*********		••••••	•••••••	•
Total direct Reimbursable program	3,374,200 654,330	*********		2,872,503 535,254	231,771 50,41 <b>6</b>	269 , 986 68 , 987
10.000) Total	4,028,530		.,	3,407,757	282,190	338, 500
Financing:		•	•			!
Offsetting collections from:						- 1
11.000) Federal funds	-49,243	1		-49, 243		
13.0001 Trust funda 14.0001 Mon-foderal sources	-604,960 -127	*******	********	-604,960		
14.0001 Hon-foderal sources 21.4001 Unobligated belance available, start of year		* * * * * * * * * * *		-127	-620,773	
24.400; Unabligated balance available, and of year				620, 773	336,563	-338,560
Salanti olionii Maton na launta atali emita al fami	*********	*********		••••	*******	********
39.0001 Budget authority	3,374,200			3,374,200		
Sugget authority:				·	,	,
40.0001 Appropriation	4,378,200			3,378,200		
41.0001 Transferred to other accounts(-)	-4,000	*********		-4,000		
43.0001 Appropriation (edjusted)	9, 974, 200	********		3,374,200		

Army Procurement of Week	pons and Track	ed Combet Vel	nioles, Army	•		00 FEB 02
Program and	Financing (in	thousands of	dollers)		1982 Flace1 ;	eer progrem
Identification code 21-2033-0-1-051		t plen (emour nt actions pro			Obligations	
	1961 actual	1982 est.	1983 ost.	1981 ectuel	1982 est.	1983 est.
Program by activities: Direct:			•			
1. Tracked combat vehicles 2. Weapons and other combat vehicles		3,215,285 661,015			2,797,298 575,083	180,764 33,051
Total direct Reimbursable program		3,676,300 713,600			3,372,361 570,660	193,815 67,792
10.0001 Total		4,589,900			3,943,261	261,607
Financing: Offsetting collections from:						
11.0001 Foderal funds 13.0001 Trust funds 21.4001 Unobligated balance evailable, start of year	*********	-116,700 - <b>59</b> 6, <b>9</b> 00			-116,700 - <b>596,9</b> 00	-646, 639
24.4001 Unobligated balance available, end of year			1		646,639	305,032
39.0001 Budget authority		3,876,300			3,876,300	
Budget authority:	************			سم		••••••
40.0001 Appropriation 42.0001 Transferred from other accounts	*********	3,825,200 51,100			3,625,200 51,100	
43.0001 Apprepriation (adjusted)		9,676,300			3,876,300	

Army Procurement	of Weepons and Tracked Combat	Vehicles, Army			08 FEB 82
Prog	rem and Financing (in thousands	of dollers)		1963 Fiscal 3	/eer program
identification code 21-2033-0-1-051	Budget plan (am procurement actions			Obligations	
·	1981 actual 1982 est	. 1983 est.	1981 motuel	1982 00%.	1983 est.
Program by activities:     Olivect:         1. Tracked combet vehicles         2. Weepens and other combet vehicles         Total direct         Reimbursable program  10.0001 Total		6,030,685 611,100			3,854,642 722,053 4,376,605 40,800 4,865,678
Financing: Offsetting collections from: 11.0001 Fedoral funds 13.0001 Trust funds 24.4001 Unobligated belance evallable, and of	yeer	-465,000			-125,100 -486,000 776,210

40.0001

3-9 February 1982

-	

### Procurement of Wespons and Tracked Combat Vehicles, Army

de	21-2033-1-1-051	procurement	plan (amour actions pro	gramed)		Obligations	
		1981 ectuel	1982 est.	1983 est.	1981 actual	1982 est.	1983 est.

identification code 21-2033-1-1-001	procurement actions programmed					
***************************************	1981 ectuel	1982 est.	1963 est.	1981 actual	1982 est.	1983 est.
Program by ectivities: Direct:				•		
10.0001 Tetal	• • • • • • • • • • • • • • • • • • • •	126,000			109,620	6,300
Financing: 21.4001 Unabligated belance svallable, start of year 24.4001 Unabligated belance svallable, and of year	*********	*********			16,380	-16,300 10,000
40.0001 Budget authority (appropriation)		126,000			126,000	
Relation of obligations to outlays: 71.0001 Obligations incurred, net 72.4001 Obligated belance, start of year 74.4001 Obligated belance, and of year					109,620	6,300 101,920 -52,020
90.0001 Out lays	<b>!</b> ·		•		7,700	56, 200

3-10 Pebruary 1982

Army

#### Procurement of Weapons and Tracked Combat Vehicles, Army

M FFR MO

#### (Supplemental now requested under existing legislation)

Object	Classification	(in thousands	of dollars	)	
			••••••		
		•		1981 ectuel	1982 -81

identification code	21-2033-1-1-051	•	1961 ectuel	1982 08%.	1903 081.
131,001 Equipment			*******	109,620	6,300
	•	•		******	********
999.901 Total	ebligations		•••••	108,620	6,300

3-11

February 1982

# PROCUREMENT OF WEAPONS AND TRACKED COMBAT VEHICLES, ARMY Section 2

Introductory Statement

3 - 12 February 1982

### DEPARTMENT OF THE ARMY ANNUAL BUDGET ESTIMATE

APPROPRIATION:

PROCUREMENT OF WEAPONS AND TRACKED COMBAT VEHICLES, ARMY

FY 1983, 84

#### Section 2 - INTRODUCTORY STATEMENT

This appropriation finances the acquisition of tanks; personnel, mortar, cargo, and Command Post Carriers; Fighting Vehicles; Combat Engineer Vehicles; Recovery Vehicles; self-propelled and towed howitzers; machine guns; mortars; modification of in-service equipment; spares and repair parts; and associated production base support.

The 1983 program provides for procurement of M1 tanks and training equipment, Infantry and Cavalry Fighting Vehicles and associated training equipment; M88 Recovery Vehicles; Command Carriers; Armored Personnel Carriers; M60 training devices; Field Artillery Ammunition Support Vehicles; Mobile Protected Gun - Cannon Vehicles; Light Armored Squad Carriers; Mobile Protected Gun - Recovery Vehicles; Smoke Grenade Launchers; Magnetic Heading Sets and Gyros; spares parts; and machine guns. Funds are provided for production of the Division Air Defense Gun system (DIVAD), Vehicle Rapid Fire Weapon System (BUSHMASTER) and XM252 81mm Mortar. Funds are also included for modification of M60 series tanks, self-propelled howitzers; Fire Support Team Vehicles (FISTV); Improved Tow Vehicles; mortar and personnel carriers. Funding resources are provided for the rehabilitation of production facilities and to establish depot maintenance facilities for tracked combat vehicles.

The FY 1984 program provides for continued procurement of M1 tanks; Infantry and Cavalry Fighting Vehicles, training equipment; Hobile Protected Guns variants; spare parts; Smoke Grenade Launchers; Division Air Defense Gun Systems; machine guns; and morters. Funds are also included for modifications of self-propelled howitzers; fire support vehicles; morters, M60 tanks and personnel carriers. Funding resources are provided for continued rehabilitation of production facilities and establishment of depot facilities.

3 - 13 February 1982

PROCUREMENT OF WEAPONS AND TRACKED COMBAT VEHICLES, ARMY
Section 3

Summary of Requirements

3 - 14 Pebruary 1982

#### SUMMARY OF REQUIREMENTS (In Thousands of Dollars)

APPROPRIATION:	· FY 1981 Actual	FY 1982 Estimate	FY 1983 Estimate
Procurement of Weapons & Tracked Combat Vehicles, Army			
Tracked Combat Vehicles	3,071,555	3,341,285	4,200,739
Weapons and Other Combat Vehicles	302, 645	661,015	829, <del>9</del> 46
Total Direct Program	3,374,200 654,330	4,002,300 713,600	>,030,685 611,100
TOTAL PROGRAM REQUIREMENTS	4,028,530	4,715,900	5,641,785
ess: Portion of program to be obligated in subsequent fiscal years	620,773	663,019	. * 776,210
Plus: Obligations incurred against prior year program funds	- ' 408,059	514,830	606 <b>,490</b>
TOTAL OBLIGATIONS	3,815,816	4,567,711	5.472.065

3 - 15 February 1982

SUMMARY OF REQUIREMENTS (In Thousands of Dollars)  APPROPRIATION:	FY 1984 Estimate
Procurement of Weapons & Tracked Combat Vehicles, Army	
Activity 1 - Tracked Combat Vehicles	\$4,750,400
Activity 2 - Weapons and Other Combat Vehicles	952,200
Total Direct Program	\$5,702,600

3 - 16 February 1982

# PROCUREMENT OF WEAPONS AND TRACKED COMBAT VEHICLES, ARMY Section 4

#### Budget Activity Justifications

Activity 1 - Tracked Combat Vehicles

Activity 2 - Weapons and Other Combat Vehicles

3 - 17 February 1982

TANGE	Department of the Army Annual Budget Estimate JUSTIFICATION	Appropriation Procurement of Wea Vehicles, Army	FY 1983 Budget	
L Bu	dget Program or Budget Project Account	ect Account (Thousands of Dollars)		
1		Actual	Estimate	Estimate
Act	tivity 1 - Tracked Combat Vehicles	FY 1981	FY 1982	FY 1983
Di	rect Obligation or Direct Budget Plan			
L		\$3,071,555	\$3,341,285	\$4,200,739

#### Section 1 - PURPOSE AND SCOPE

Provides for procurement of tracked combat vehicles including M1 tanks, Infantry and Cavalry Fighting Vehicles, training equipment, Command Post Carriers; Armored Personnel Carriers; and associated equipment. The request also provides for modification kits, major assembly repair parts (including initial provisioning), related production base support and depot maintenance plant equipment.

#### Section 2 - JUSTIFICATION OF FUNDS REQUESTED

Tracked Combat Vehicles - The requested funding level provides for the procurement of the following tracked combat vehicles to improve near term readiness and to meet modernization goals: Abrams M1 tank, Bradley Fighting Vehicle System, Command Post Carrier; Armored Personnel Carrier; Field Artillery Ammunition Support Vehicle, M88Al Recovery Vehicle, Light Armored Squad Carrier; Mobile Protected Gun - Recovery Vehicle. To further improve and enhance Army material readiness of high priority combat vehicles, funds are requested for the following modification programs: upgrade of the current fleet of the M113 family of carriers and Improved TOW Vehicles, enhancement of the M109 and M110 self-propelled howitzers, Fire Support Team Vehicles and upgrade of some M60Al tanks to the M60A3 configuration. Each of the major items included in this request is discussed helow:

Carrier, Command Post - \$23.5 million is requested for procurement of 114 command post carriers. The Command Post Carrier is a command post and fire direction center which supports mechanized artillery and air of ense units.

Carrier, Personnel Armored - \$92.0 million is requested for procurement of 520 Armored Personnel Carriers (APC). The APC transports an infantry squad with full battle gear, giving protection against 7.62mm small arms fire and artillery fragments.

Bradley Fighting Vehicles - \$793.3 million is requested for production of 600 Infantry and Cavalry Fighting Vehicles (IFV/CFV). The IFV/CFV is designed to be compatible with the new MI main battle tank and provides improved firepower, cross-country mobility, and ballistic protection to infantry squads and cavalry sections. The armament is designed to engage an array of enemy targets and will include a two-man turret employing a 25mm automatic cannon, the TOW antitank guided missile system, and a 7.62mm coaxial machine gun, all utilizing an integrated day/night thermal sight. Using the organic 5.56mm firing port weapon, the mounted infantry will be able to deliver suppressive fires around the vehicle. Interior configuration varies in the CFV to allow for differences in crew size and storage requirements.

Department of the Army
Annual Budget Estimate
JUSTIFICATION

Appropriation
Procurement of Weapons & Tracked Combat Vehicles, Army

Department of the Army
Annual Budget Estimate
JUSTIFICATION

Budget Program or Budget Project Account
Activity 1 - Tracked Combat Vehicles

Advanced Procurement - Bradley Fighting Vehicles: \$49.2 million is requested for procurement of long leadtime manufacturing items and components to support the FY84 production of Infantry and Cavalry Fighting Vehicles.

Bradley Fighting Vehicle Training Devices: \$38.8 million is requested for initial procurement of unit conduct-of-fire trainers for Fighting Vehicle System crews. These trainers will be deployed to Army schools at Ft Benning, CA, and Ft Knox, KY, for individual training of IFV/CFV gunners and commanders. Training devices will employ highly realistic battle scenario simulation rather than actual firing on the range. Not only will this provide a much wider range of battle conditions and situations than could be obtained on firing ranges, but substantial ammunition expenditure and attendant costs will be avoided, and the strain on limited range facilities will be lessened.

Field Artillery Ammunition Support Vehicle (FAASV): \$106.4 million is requested provide funds for tooling and the initial procurement of 250 FAASV, the replacement for the M548 ammunition carrier in all self-propelled field artillery units in Europe. The FAASV provides armor protection for the ammunition and crew as well as new ammunition handling equipment which results in a much less man intensive system of ammunition resupply in the battle area.

Recovery Vehicle, Med, FT, M88Al: \$157.8 million is requested to procure 180 M88Als to meet the needs of armor units for required tank recovery capability.

Tank, Combat, FT, 105mm Gun, M1: \$1457.0 million is requested for procurement of 776 Ml tanks. The Ml tank is a superior tank to the M60 series tank. It will have significantly improved survivability provided by better armor protection and compartmentalization of ammunition and fuel. Its 1500-hp turbine engine and improved suspension system will provide greater cross-country speed and shoot-on-the-move capability. The M1 tank will be the Army's primary weapon system for armor battalions and is needed to counter the threat of the 1980's and 1990's.

Advance Procurement, M1 Tank: \$432.3 million is requested for procurement of long leadtime manufacturing items, components, and government-furnished equipment to support the FY 1984 production of M1 tanks.

Training Equipment For M60 Tank: \$12.6 million is requested to procure training equipment for use in M60 crew and maintenance personnel training programs. Use of training equipment permit more efficient utilization of training areas and provides continuous training for personnel which reduces wear on actual equipment.

3-19 February 1982

Department of the Army
Annual Budget Estimate
IUSTIFICATION

Appropriation
Procurement of Weapons and Tracked Combat Vehicles, Army

Department of the Army
Annual Budget Estimate
Budget
Budget
Activity 1 - Tracked Combat Vehicles

Light Armored Squad Carrier (LASC): - \$51.7 million will be used to procure 158 squad carriers for the infantry battalions of the Army's light divisions. This is the initial buy of LASC's.

Mobile Protected Gun - Cannon Vehicle (MPG-CV): \$51.9 million will be used to procure 76 MPG-CVs equipped with the M242 BUSHMASTER cannon. This is the initial buy of MPGs to provide the light divisions with an antiarmor assault capability.

Mobile Protected Gun - Recovery Vehicle (MPG-RV): \$7.7 million will be used to procure 24 recovery vehicles for the Army's light divisions. This is an initial buy of MPG-RV's. This vehicle is to provide maintenance support to the family of light armored vehicles in the light divisions.

Carrier, Modification (Mod): \$41.0 million will procure 3151 improved suspension and cooling kits which will improve cross-country mobility and reliability of the M113 carrier family.

Improved TOW Vehicle (Mod): '\$81.9 million will purchase fabrication and installation of 311 ITV kits on renovated and converted M113 chassis.

Fire Support Team Vehicle (FISTV) (Mod): \$63.8 million is requested to provide funds for tooling and the initial procurement of 130 kits for the Fire Support Team Vehicle, an integrated system platform which will provide under - armor protection for the ground laser locator designator mounted an Mill Carrier. The FISTV vastly increases the capability of the artillery fire support team to provide rapid, accurate indirect fire support to the maneuver forces by providing laser designation on targets for the Copperhead Cannon Launched Guilded Projectile.

Howitzer, Medium, SP, 155mm, M109 Ser (Mod): \$2.1 million is requested to continue engineering effort on the Howitzer Extended Life Program (HELP) which is designed to improve the readiness and survivability of M109 series howitzers. This modification consists of reliability, availability, maintainability (RAM) improvements, NBC protection and survivability kits.

Howitzer, Heavy, SP, FT, 8-Inch, M110 Series (Mod): \$26.8 million is requested to continue the procurement of the reliability, availability, and maintainability (RAM) improvements for the M110 series howitzers. These funds will also initiate the procurement for the crew ballistic protection shelter and the gun tube liner.

Tank, Combat, FT, 105mm Gun, M60 Series (Mod): \$162.9 million is requested to procure 360 modification kits to convert M60A1 tanks
the M60A3 configuration. The M60A3 employs a solid state ballistic computer, laser range finder and thermal sight to maximise effec-

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Appropriation
Procurement of Weapons and Tracked Combat Vehicles, Army

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Budget Program or Budget Project Account
Activity 1 - Tracked Combat Vehicles

riveness of the system for both day and night situations; also continues the H6OAl, Combat Engineer Vehicle and Armored Vehicle Launched Bridge Modification.

Spares and Repair Parts: \$383.5 million is requested for procurement of initial and replenishment spares and repair parts related to tracked combat vehicles.

Items Less Than \$900,000: \$0.9 million is requested for procurement of maintenance and repair equipment for tracked combat vehicles. Equipment to be procured includes shop sets and tool kits.

Production Base Support: \$105.5 million is requested for production base support, which includes depot maintenance plant equipment requirements. Major areas of emphasis are: \$23.3 million for production support and equipment replacement at M1 tank production facilities, \$29.5 million for MEI facilitization and \$.4 million for modernization of fire control production facilities. The FY83 request also includes \$6.0 million for layaway of equipment excess to production, \$23.6 million for various manufacturing methods and technology priects, and \$.7 million for military adaptation of commercial items. \$16.4 million is requested to procure capital investment equipment required to support depot maintenance operations, increased workload, facility modernization, and age/wear consideration. With the introduction of the M60A3 and M1 tanks, DIVAD Gun and the Fighting Vehicle System, depot maintenance facilities must be astablished both in the US and Europe to support the overhaul and repair of these vehicles. The equipment to be procured will provide the depots with the capability to more rapidly diagnose, repair, and check out the electrical and mechanical subsystems of these vehicles. \$5.6 million is for expansion of Mainz Army Depot in Mainz, Germany to accommodate the increasing work load.

TANKOT	Department of the Army Annual Budget Estimate JUSTIFICATION	Appropriation Procurement of Weapons & Tracked Combat Vehicles. Army	FY 1983 Budget	
Ļ	Budget Program or Budget Project Account	(Thousands of Dollars)		
I	Activity 1 - Tracked Combat Vehicles	·	Estimate FY 1984	
1	Direct Obligation or Direct Budget Plan		\$4,750,400	

#### Section 1 - PURPOSE AND SCOPE

Provides for procurement of tracked combat vehicles including tanks, Infantry and Cavalry Fighting Vehicles, the Field Artillery Ammunition Support Vehicle (FAASV), M88Al Recovery Vehicle, Mobile Protected Gun - Cannon Vehicle, Light Armored Squad Carriers, and Mobile Protected Gun Recovery Vehicles, Fire Support Team Vehicles; and associated equipment. The request also provides for modification kits, major assembly repair parts (including initial provisioning), related production base support, and depot maintenance plant equipment.

#### Section 2 - JUSTIFICATION OF FUNDS REQUESTED

Tracked Combat Vehicles: The requested funding level provides for continued procurement of the following tracked combat vehicles:
Field Artillery Ammunition Support vehicle (FAASV), MB8Al Recovery Vehicle, Light Armored Squad Carrier (LASC), Mobile Protected Gun-Cannon Vehicle, Mobile Protected Gun-Recovery Vehicle, M1 tanks and Fighting Vehicles Systems to meet modernization goals and improve near-term readiness and sustainability. To further improve/enhance Army material readiness of high-priority combat vehicles, the following modification programs are continued: M60 tank, M113 family of carriers, M109 and M110 series howitzers. Funds are also requested for further procurement of Fire Support Team Vehicle (FISTV) kits. Each of the major items included in this request is discussed below:

Bradley Fighting Vehicles: \$739.8 million is requested to procure 555 Fighting Vehicle Systems. The FVS is designed to be compatible with the new MI main battle tank, with improved firepower, cross-country mobility, and ballistic protection for infantry squads and cavalry sections. The armament is designed to engage an array of enemy targets and will include a two-man turret employing a 25mm automatic cannon, the tube-launched, optically tracked, wire-guided (TOW) antitank guided missile system, and a 7.62mm coaxial machine gun, all utilizing an integrated day/night thermal sight. Using the organic 5.56mm firing port weapon, the mounted infantry will be delivering suppressive fires around the vehicle. Interior configuration varies in the Cavalry Fighting Vehicle to allow for differences in crew size and storage requirements.

Advance Procurement-Bradley Fighting Vehicles: \$56.7 million is requested for procurement of long leadtime manufacturing items and components to support the production of Infantry and Cavalry Pighting Vehicles.

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ğ	Department of the Army	•	FY 1983
Š	Annual Budget Estimate  JUSTIFICATION		Budget
		rogram or Budget Project Account	
	Procurement of Weapons and Tracked Combat Vehicles, Army Activity	1 - Tracked Combat Vehicles	

Bradley Fighting Vehicle Training Devices: \$56.7 million is requested to continue procurement of conduct-of-fire trainers and to purchase turret maintenance trainers for schools. The turret maintenance trainers, and computer driven simulation devices permit insertion of a wide selection of system faults and greatly enhance fault isolation and diagnostic skill development.

Field Artillery Ammunition Support Vehicle (FAASV): \$73.7 million is requested to provide funds for continued procurement of the FAASV which are replacements for the M548s in self-propelled field artillery units in Europe. The FAASV provides armor protection for the ammunition and crew as well as new ammunition handling equipment to make ammunition handling less man-intensive in the battle area.

Recovery Vehicle, Med, Full Tracked M88Al: \$185.5 million is requested to procure 197 M88Al's to meet needs of armor units for required tank recovery capability.

Tank, Combat FT, 105mm Gun, NI Series: \$1,950.4 million is requested for procurement of 1080 Ml tanks. The Ml will be a highly mobile vehicle with significantly improved survivability provided by improved armor protection and compartmentalization. It will mount a large-caliber gun and two complementary armament systems with improved fire control and shoot-on-the-move capability. The Ml tank will become the Army's main battle tank in armor units. It will be used as the primary offensive weapon on the Army's combined arms team to counter the threat of the 1980's.

Advanced Procurement, Tank, H1, Combat, FT: \$513.1 million is requested for procurement of long leadtime manufacturing items, components, and government-furnished equipment to support the FY 1985 production.

Training Equipment for HI Tank: \$35.4 million is requested to procure training equipment for use in MI crew and maintenance personnel training programs. Use of training equipment permits more efficient utilization of training areas and provides continuous training for personnel which reduces wear on actual equipment.

Light Armored Squad Carrier (LASC): \$102.7 million will be used to procure 282 squad carriers for the Army's light divisions. This represents a second year buy.

Mobile Protected Gun - Cannon Vehicle (MPG-CV): \$102.4 million will be used to procure 126 Mobile Protected Gun - Cannon Vehicles (MPG-CV) equipped with the M242 BUSHMASTER cannon. This represents the second year buy of righting vehicles for light divisions.

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Procurement of Weapons and Tracked Combat Vehicles, Army

Activity 1 - Tracked Combat Vehicles

Mobile Protected Gun - Recovery Vehicle (NPG-RV): \$14.8 million will be used to procure 41 MPG-RVs to provide maintenance support for the MPGs of the light divisions. This represents a second year buy of MPG-RVs.

Carrier Modifications (Mod): \$34.9 million is requested for procurement of kits to provide improved suspension and improved cooling to Mill3Al carrier series.

Fire Support Team Vehicle (FISTV) (Mod): \$195.9 million is requested to provide funds for continued procurement of 495 kits for the Fire Support Team Vehicles, an integrated system platform which will provide under-armor protection for the Ground Laser Locator Designator. Mounted on an M13 carrier, the FISTV will vastly increase the capability of the artillery fire support team to provide rapid, accurate indirect fire support to the maneuver forces by providing laser designation on targets for Copperhead Cannon Launched Guided Projectile.

Howitzer, Medium, SP, 155mm M109 Series (Mod): \$4.7 million in funding is requested to complete engineering effort on the Howitzer Extented Life Program (HELP) which is designed to improve the readiness and survivability of the M109 series self-propelled howitzers. Additionally, a thermal warning device, which improves safety by alerting the crew to a dangerously hot tube will be applied.

Howitzer, Heavy, SP, FT, 8-Inch H110A2 (Mod): \$24.5 million is requested for procurement for the crew ballistic protection shelter and the gun tube liner.

Tank Combat, Full Tracked, 105mm Gun, M60 Series (Mod): \$182.3 million is requested to procure 360 modification kits to convert M60Al to M60A3 configuration. The M60A3 employs a solid state computer, laser range finder and thermal sight to maximize effectiveness of the sys over both day and night situations. Also provides for continued M60A1, Combat Engineer Vehicle and Armored Vehicle Launched Brio. Modifications.

Spares and Repair Parts: \$394.5 million is requested for procurement of initial and replenishment spares and repair parts items related to tracked combat vehicles.

Items Less Than \$900,000: \$1.0 million is requested for the procurement of maintenance and repair equipment for tracked combat webicles.

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Activity 1 - Tracked Combat Vehicles

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Production Base Support: \$81.4 million is requested for production base support. \$31.5 million is requested to provide annual production support and equipment replacement to maintain current tank production rates. \$6.8 million is requested for manufacturing equipment required at the tank production facilities for incorporation of the M1 product improvement programs. \$4.6 million is to continue rehabilitation of the Stratford Army Engine Plant, and \$.2 million to modernize fire control facilities. The balance of the request provides \$6.1 million for layaway of the M60 series tank production lines and \$10.7 million for various manufacturing methods and technology projects. There is \$21.5 million for depot maintenance equipment required to support fielding of new systems in Germany such as the M1 tank, Bradley Fighting Vehicle Systems, Division Air Defense Gun and the Mobile Protected Gun family.

3 - 25 February 1982

Department of the Army Annual Budget Estimate JUSTIFICATION	Appropriation Procurement of Wear Vehicles, Army	Procurement of Weapons & Tracked Combat		
- Budget Program or Budget Project Account		(Thousands of Dollars)		
	Actual	Estimate	Estimate	
Activity 2 - Weapons and Other Combat Vehicles	FY 1981 *	FY 1982	FY 1983	
Direct Obligation or Direct Budget Plan	\$302,645	\$661,015	\$829,946	

#### Section 1 - PURPOSE AND SCOPE

Provides for procurement of weapons and other combat vehicles including air defense weapons, morters, machine guns, and associated equipment. The request also provides for modification (mod), procurement of depot reparable major assembly repair parts (including initial provisioning), related production base support, and depot maintenance plant equipment.

#### Section 2 - JUSTIFICATION OF FUNDS REQUESTED

Weapons and Other Combat Vehicles: The requested funding level provides for continued procurement of the Vehicle Rapid Fire Weapon System (VRFWS) (BUSHMASTER weapons), M240 machine gun, Smoke Grenade Launcher, Magnetic Heading Set and gyros. Funding is also requested for the procurement of the Division Air Defense (DIVAD) Gun System, DIVAD advance procurement, 9mm Personal Defense Weapon, XM252 81mm Mortar, and Squad Automatic Weapon (SAW). Each of the items included in this request is discussed below:

DIVAD Gun: \$521.1 million is requested for further procurement of 96 DIVAD guns. This system will provide air defense for divisional maneuver elements against attack by armed helicopters and high performance fixed-wing aircraft.

Advance Procurement, DIVAD Gun: \$74.4 million is requested for the procurement of long leadtime manufacturing items and components to support the FY84 production of the DIVAD gun.

Armor Machine Gun, 7.62mm, M240: \$26.4 million is requested for procurement of 5400 machine guns. This request will continue the five-year multiyear procurement from a Continental United States (CONUS) producer. The resultant asset posture is 36 percent of the acquisition objective. The M240 replaces the M219 Armor Machine Gun and provides significant reliability improvements.

Squad Automatic Weapon (SAW): \$10.5 million is requested for the second year procurement of 3579 Squad Automatic Weapons. This lightweight, highly mobile machine gun delivers sustained fire and increased range and will greatly enhance the effectiveness of the infantry rifle squad.

Launcher Smoke Grenade (Mod): \$3.4 million is requested to continue procurement of protective smoke systems for combat vehicles. The launcher provides near instantaneous smoke protection and is a defensive aid against antitank missiles.

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Procurement of Weapons and Tracked Combat Vehicles, Army

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.Activity 2 - Weapons and Other Combat Vehicles

Mortar, 81mm, XM252: \$10.6 million is requested to procure 352 XM252 81mm mortars. The improved mortar replaces the M30 4.2 inch mortar as the battalion/squadron mortar in all combat units and the M29 81mm mortar as the company mortar for mechanized infantry and cavalry troops. The system is composed of both United Kingdom and US-produced components.

9mm Personal Defense Weapon (PDW): \$4.4 million is requested to procure 11,500 9mm handguns. This is the first year of a ten year Army procurement of new 9mm handguns to replace an aging and depleted stock of M1911Al caliber .45 handguns and caliber .38 revolvers. This will also enhance NATO Rationalization, Standardization and Interoperability (RSI) hand guns and ammunition throughout the Alliance.

Vehicle Rapid Fire Weapons System (VRFWS) (BUSHMASTER): \$33.4 million is requested for the procurement of 532 25mm VRFWS, BUSHMASTER weapons. The BUSHMASTER is the primary armament for the Bradley Fighting Vehicles.

Heading Reference Set (Magnetic Set): \$3.7 million is requested for initial procurement of the Heading Reference Set. This set is a low-cost unit that provides vehicle heading information to assist the combat vehicle driver to maintain orientation during periods of limited visibility or over terrain with few distinguishable features.

Heading Reference Set (GYRO Group) (Mod): \$1.5 million is requested for initial procurement of this item. It is a directional gyro unit that is used in conjunction with the Heading Reference Set to provide the armored unit commander with more accurate vehicle heading information to maintain orientation during periods of limited visibility or over terrain with few distinguishing features.

Modification Under \$900,000: \$.9 million is requested for modification of weapons and other combat vehicles.

Spares and Repair Parts: \$107.9 million is requested for procurement of initial and replenishment spares and repair parts related to weapons and other combat vehicles.

Items Less Than \$900,000: \$2.6 million is requested for procurement of shop sets and tool sets for maintenance and repair of weapons and other combat vehicles.

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Activity 2 - Weapons and Other Combat Vehicles

Production Base Support: Production base support programs require \$29.1 million FY 1983. \$4.2 million is for plant equipment in support of various weapons systems, and \$1.3 million for rehabilitation of small arms production facilities. Additionally, \$6.8 million is being requested for manufacturing methods and technology, \$1.3 million for layaway of industrial facilities, and \$1.3 million for military adaptation of commercial items. \$13.3 million is for depot support for the DIVAD gun and \$.9 million for weapons depot support.

3 - 28 February 1982

*	Annual Budget Estimate JUSTIFICATION	Appropriation Procurement of Weapons & Tracked Combat Vehicles, Army (Thousands of Bollars)	FY 1983 Budget
	Budget Program or Budget Project Account	(1.000000000000000000000000000000000000	Estimate
	Activity 2 - Weapons and Other Combat Vehicles		FX 1984
1	Direct Obligation or Direct Budget Plan		\$ 952,200

#### Section 1 - PURPOSE AND SCOPE

Provides for procurement of weapons and other combat vehicles including air defense weapons, towed artillery, mortars, machine guns, and associated equipment. The request also provides for modification kits, procurement of depot reparable major assembly repair parts (including initial provisioning), related production base support, and depot maintenance plant equipment.

#### Section 2 - JUSTIFICATION OF FUNDS REQUESTED

Weapons and Other Combat Vehicles: The requested funding provides for continued procurement of the Division Air Defense Gom (DIVAD), DIVAD Gun advance procurement, 9mm Personal Defense Weapon, the XM252 81mm mortar, the Squad Automatic Weapon, the Vehicle Rapid Fire Weapon System (VRFWS) (BUSHMASTER), and the M240 machine gun. Modification programs are continued for the Smoke Grenade Launchers and the Magnetic Reading Set with gyro systems. Each of the major items included in this request is discussed below:

DIVAD Gun - \$595.4 million is requested for the third year procurement of 190 DIVAD Guns. This system will provide air defense for divisional maneuver elements against attack by armed helicopters and high-performance, fixed-wing aircraft.

Advance Procurement - DIVAD Gun: \$66.9 million is requested for the procurement of long leadtime manufacturing items and components to support the FY85 production of the DIVAD gun.

Armor Machine Gun, 7.62mm, M240: \$25.4 million is requested for procurement of 4800 M240 machine guns. This request will complete the five-year multiyear procurement from a Continental United States (CONUS) producer. The M240 replaces the M219 Armor Machine Gun and provides significant reliability improvement.

Squad Automatic Weapon (SAW): \$16.5 million is requested for the third-year buy of 6000 Squad Automatic Weapons. This is a one-man weapon which can deliver a sustained volume of automatic, accurate, and lethal fire at ranges up to 1000 meters. It will greatly enhance infantry rifle squad effectiveness.

Launcher, Smoke Grenade (Mod): \$3.6 million is requested to continue procurement of these protective smoke systems for combat vehicles. This is an effective defense system against antitank missiles.

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Procurement of Weapons and Tracked Combat Vehicles, Army

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Activity 2 - Weapons and Other Combat Vehicles

<u>KM252 81mm Mortar</u>: \$37.9 million is requested to procure 1204 XM252 81mm mortars. The improved mortar replaces the M30 4.2 inch mortar as the battalion/squadron mortar in all combat units and the M29 81mm mortar as the company mortar for mechanized infantry and cavalry troops. The system is composed of both United Kingdom and US-produced components.

9mm Personal Defense Weapon (PDW): \$4.2 million is requested to procure 11,650 9mm handguns. This is the second year of a ten year Army procurement of new 9mm handguns to replace an aging and depleted stack of M1911Al caliber .45 handguns and caliber .38 revolvers. This will also enhance NATO Rationalization, Standardization and Interoperability (RSI) efforts to standardize all of NATO on 9mm handguns and ammunition.

Vehicle Rapid Fire Weapons Systems (VRFWS) (BUSHMASTER): \$35.5 million is requested for the procurement of 532 25mm VRFWS, BUSHMASTER. The BUSHMASTER is the primary armsment for the Fighting Vehicle Systems.

Heading Reference Set (Magnetic Set) (Mod): \$4.5 million is requested to continue procurement of this item. It is a low-cost unit that provides vehicle heading information to assist the combat vehicle driver maintain orientation during periods of limited visibility.

Heading Reference Set (Gyro Group) (Mod): \$1.9 million is requested to continue procurement of the Heading Reference Set-Gyro. It is a directional gyro unit that is used in conjunction with the Heading Reference Set to provide the armored unit commander with more accurate heading information.

Modifications Under \$900,000: \$.9 million is requested for modifications to weapons and other combat vehicles.

Spares and Repair Parts: \$113.2 million is requested for procurement of initial and replenishment spares and repair parts related to weapons and other combat vehicles.

Items Less Than \$900,000: \$2.9 million is requested for procurement of shop sets and tool sets for maintenance and repair of weapons and other combat vehicles.

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Department of the Army
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Procurement of Weapons and Tracked Combat Vehicles

Production Base Support: Production base support programs require \$43.4 million in FY 1984. \$8.5 million is for plant equipment package voids at Watervliet Arsenal. Another \$4.0 million is for plant equipment in support of various weapon systems. \$13.3 million is being requested for manufacturing methods and technology, \$1.9 million for laysway of industrial facilities, and \$2.1 million for military adaptation of commercial items. \$1.1 million is required for procurement of capital equipment required to support depot maintenance operations associated with the 9mm Personal Defense Weapon and Squad Automatic Weapon. Additionally, \$12.5 million is for depot support of the DIVAD Gum.

#### PROCUREMENT OF WEAPONS AND TRACKED COMBAT VEHICLES, ARMY

#### Section 5

### Comparison of Program Requirements and Financing

Comparison of FY 1981 program requirements as reflected in FY 1982 budget with FY 1981 program requirements as shown in the FY 1983 budget.

Comparison of FY 1981 financing as reflected in FY 1982 budget with FY 1981 financing as shown in FY 1983 budget.

Comparison of FY 1982 program requirements as reflected in FY 1982 budget with FY 1982 program requirements as shown in FY 1983 budget.

Comparison of FY 1982 financing as reflected in FY 1982 budget with FY 1982 financing as shown in FY 1983 budget.

### COMPARISON OF FY 1982 PROGRAM REQUIREMENTS AS REFLECTED IN FY 1982 BUDGET WITH FY 1982 PROGRAM REQUIREMENTS AS SHOWN IN FY 1983 BUDGET

SUMMARY OF REQUIREMENT Appropriation: PROCUREMENT OF WEAPONS AND TRACKED COMBAT VEHICLES	S (In Thousands of Total Program Requirements Per FY 82 Budget	Program Requirements Per FY 1983 Budget	Increase (+) or Decrease (-)
Activity 1 - Tracked Combat Vehicles	3,202,100	3,341,285	+139,185
Activity 2 - Weapons and Tracked Combat Vehicles	654,600	661,015	+ 6,415.
	3,856,700	4,002,300	+145,600

#### Explanation By Activity

Activity 1 - Tracked Combat Vehicles - A net increase of \$139.2 million resulted from Congressional adjustments, reductions from the appropriation to finance the National Guard appropriation, a transfer of \$1.9 million from activity 2 to Activity 1 (-\$1.9 machine gum, +1.9 initial spares), and a transfer from other accounts to activity 1 (inflation adjustment).

<u>Item</u>	Net Change (in thousands)
Bradley Fighting Vehicle Systems (BFVS)	+ 700
M88A1 Recovery Vehicle	23,200
Tank, Combat, FT, 105 Gun, M1	
M1 Training Equipment	+ 600
Improved TOW Vehicle (MOD)	+ 400
Tank Combat, FT, 105mm Gun M60 Series (MOD)	
Production Base Support (TCV)	+13,300
HI Tank Surge Capability	+ 1,685

Total Net Change

+139,185

Activity 2 - Wespons and Other Combat Vehicles: A net increase of \$6.4 million resulted from a transfer of \$1.9 million to activity 1, reductions to finance the National Guard appropriation, and a transfer from other accounts to activity 2 (inflation adjustment).

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# COMPARISON OF FY 1982 PROGRAM REQUIREMENTS AS REFLECTED IN FY 1982 BUDGET WITH FY 1982 PROGRAM REQUIREMENTS AS SHOWN IN FY 1983 BUDGET

Appropriation: PROCUREMENT OF WEAPONS AND TRACKED COMBAT VEHICLES	-	_		uiremen Budget		Increase or Decrease	•
Item		Net	Chan	ge (in	thousands)		
DIVAD Gun DIVAD Advance Procurement Howitzer, Medium, Towed, 155mm M198 Armor Machine Gun, M240 Squad Automatic Weapon (SAN) Radar Chronograph M90 Vehicle Rapid Fire Weapons System - BUSHMASTER Firing Port Weapon - IFV Howitzer, 155mm, M14A2 (MOD) Launcher, Smoke Grenada (MOD) Spares and Repair Parts (WOCV). Items Lass Than \$900,000 (WOCV) Production Base Support (WOCV).		•	+ + + + + + + + + + + + + + + + + + + +	,600 900 ,500 200 100 500 200 100 100 600 100 915			
Total Net Change			+ 6	,415			

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#### COMPARISON OF FY 1982 FINANCING AS REFLECTED IN THE FY 1982 BUNGET WITH FY 1982 FINANCING AS SHOWN IN FY 1983 BUNGET

(In Thousands of Dollars)

		, (111 111000011101 01 0011111		
Appropriation:	Financing Per FY 1982	Financing Per FY 1983	Increase (+)	_
Procurement of Weapons & Tracked Combat Vehicles, Army	Budget	Budget	Decrease (-)	
Program Requirements, (Total)	\$4,570,300 (3,856,700) ( 490,700)	\$A,715,900 (4,002,300) ( 713,600)	\$+145,600 (+145,600) 0	
Less: Anticipated reimburgements	490,700	713,600	. 0	
Reprogramming from prior year budget plans	<b>o</b> .,	0	0	
Unobligated balance available from prior year to finance new budget plans	0	0	. 0	
Unobligated halance transferred to other accounts	0	0	0	
Add: Unobligated balance transferred to other accounts	0	. 0	0	
Unobligated balance evailable to finance subsequent year budget plans	. 0	0	0	
BUDGET AITHORITY	\$3.856.700	34,002,300	+145,600	
Budget Authority Appropriation Transferred from other accounts Transferred to other accounts Appropriation (adjusted)	\$3,856,700 0 0 3,856,700	\$3,951,200 51,100 0 4,002,300	-31,590 +51,100 0 145,600	•
•			•	

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## COMPARISON OF FY 1981 PROGRAM REQUIREMENTS AS REFLECTED IN FY 1982 BUDGET WITH FY 1981 PROGRAM REQUIREMENTS AS SHOWN 1N FY 1983 BUDGET

Appropriation:	Total Program	•	Increase (+)
Procurement of Weapons & Tracked Combat Vehicles	Requirements Per FY 82 Budget	Program Requirements Per FY 1983 Budget	or Decrease (-)
Activity 1 - Tracked Combat Vehicles	3,072,000	3,071,600	~400
Activity 2 - Weapons and Other Combat Vehicles	306,200	302,600	_3,600
	3,378,200	3,374,200	-4,000

#### EXPLANATION BY ACTIVITY

Activity 1 - Tracked Combat Vehicles - A net decrease of \$400 thousand resulted from the transfer of \$1,600 from MSSA1 to the aircraft appropriation account and below threshold reprogrammings within activity 1.

<u>Item</u>	<ul> <li>Net Change (in thousands)</li> </ul>
Recovery Vehicle, Med, FT, MSSA1	6,500
Tank Combat, FT; 105mm Gun, M1	-2,000
Training Equipment	
Carrier Mod Roll	+4,900
Improved Tow Vehicle	+1,200
Total (Not Channe)	- 400

Activity 2 - Weapons and Other Combat Vehicles - A net decrease of \$3,600 thousand resulted from a transfer of \$2,400 thousand to the aircraft appropriation account (Howitzer, Med, Towed, 155mm, M198; magnetic heading set (MHS) and MHS-GYRO), below threshold reprogrammings within the activity and a reprogramming to the DIVAD Gun and DIVAD advance procurement line.

Total (Net Change)	- 3,600(
MRS ~ Gyro	- 1,000
Magnetic Heading Set (MHS)	
How, Med Towed, 155mm H198	- 400
DIVAD Advance Procurement	+29,100
DIVAD Gun	-29,100

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#### COMPARISON OF FY 1981 FINANCING AS REFLECTED IN THE FY 1982 BUDGET WITH FY 1981 FINANCING AS SHOWN IN FY 1983 BUDGET

(In Thousands of Dollars)

	, , , , , , , , , , , , , , , , , , , ,					
Appropriation:  Procurement of Weapons & Tracked Combat Vehicles, Army	Financing Per FY 1982 Budget	Financing Per FY 1983 Budget	Increase (+) or Decrease (-)			
Program Requirements, (Total)	84,194,300 (3,378,200) ( 816,100)	84,028,530 (3,374,200) ( 654,330)	\$-165,770 (- 4,000) (-161,770)			
Less: Anticipated reimbursements	816,100	654,330	-161,770			
Reprogramming from prior year budget plans	0					
Unobligated belance available from prior year to finance new budget plans	, <b>o</b>	0				
Unobligated balance transferred from other accounts	0	٠	0			
Add: Unobligated balance transferred to other accounts	0	0	0 .			
Unobligated balance evailable to finance subsequent year budget plans.	. 0	A1 337 300	4.000			
RUDGET AUTHORITY	\$3,378,200	\$3,374,200	- 4,000			
Budget Authority Appropriation	3,378,200 0 0 3,378,200	3,378,200 0 4,000 3,374,200	- 4,000 0 - 4,000			

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PROCUREMENT OF WEAPONS AND TRACKED COMPAT VEHICLES, ARMY
Section 7

Analysis of Unobligated Balances

3 - 38 February 1982

#### PROCUREMENT OF WEAPONS AND TRACKED COMBAT VEHICLES, ARMY

#### Analysis of Unobligated Balanced - FY 1983 Programs\*

#### Summary by Category

<u>Category</u>			Estimated Unobligated		
	· · · · · · · · · · · · · · · · · · ·		Dollars	2 of Total	
		•	(Millions)	Unobligated	
1.	Reserved to support contracts		878,492	75	
2.	Engineering changes		93,705	8	
3.	Other	•	199,125	17	
	•	Total Unobligated FY 1983	\$1,171,322	100	

#### EXPLANATION BY CATEGORY

Based on past experience, it is predicted that the above amount will remain unobligated at the end of FY 83. Reasons for the unobligated balance have been grouped into three general categories, and are detailed below. These unobligated amounts will, therefore, be required in subsequent fiscal years to complete the procurement of the FY 83 program.

- 1. Reserved to Support Contracts:
  - a. Amounts reserved for incentive contract payments.
  - b. Amounts held to support Product and Component Improvement Programs; modification for retrofit during production; modification ordered by customers.
  - c. Contractor claims, reserves to cover potential liabilities for contracts containing escalation clauses for labor, or material cost increases and price redeterminations.
  - d. Government-furnished equipment breakout procurements; preparations of manuals and technical data; and reserve for completion of construction elements of production base support facilities projects.
  - e. Delay due to design or testing difficulties.
  - f. Award protests.
  - g. Insufficient procurement detail involving reimbursable orders.
  - h. Develop adequate competitive procurement or technical data package.
  - 1. Items released to Army by other customers too late to permit obligation in FY 1982.
- · Includes estimated FY 1982 and prior years carryover and other customer reimbursable programs.

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PROCUREMENT OF WEAPONS AND TRACKED COMBAT VEHICLES, ARMY (Cont'd)

#### 2. Engineering Changes:

- a. Engineering costs in support of production (obligated only as expenses are incurred).
- b. Validated engineering change orders to be incorporated into the current manufacturing process.
- c. Engineering changes as a result of acceptance testing.
- d. Amounts reserved to support engineering change proposals and value engineering proposals.

#### 3. Other:

- a. Changes to the previously planned method of procurement (i.e., competitive in lieu of sole-source).
- b. Extension to bid opening dates.
- c. Additional time required to complete audits of cost data and to obtain contractor cost data.
- d. Unfavorable pre-sward surveys and extended negotiations.
- e. Held pending validation of production capability of low bidder.
- f. Attaining a satisfactory production rate prior to awarding additional work.

# PROCUREMENT OF WEAPONS AND TRACKED COMBAT VEHICLES, ARMY Appendix

Consultants, Studies and Analyses, and Management Support Contracts

Exhibit PB-21, Special Analysis

Narrative Justification

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#### FY 1903 PRESIDENT'S BUDGET PO-21, SPECIAL ANALYSIS COMSULTANTS, STUDIES AND ANALYSES AND MAMAGEMENT SUPPORT CONTRACTS (DOLLARS IN THOUSANDS)

, APPROPRIATION: HEAPONS AND TRACKED CO	OMBAT VEHICLES,	ARHY 6	NATE: 01/25/02
	FY 1981	FY 1982	PY 1963
A. EXPERTS AND CONSULTANTS		8	
1. PERSONNEL APPOINTMENTS	168	. 84	-
A. EXPERTS B. CONSULTANTS (1) FEDERAL ADVISORY	(168)	(84)	:
CONMITTEE MEMBERS (2) ALL OTHER APPOINTED CONSULTANTS	- '((168))	7 ((84))	-
2. CONTRACT CONSULTANTS		· •	
8. CONTRACT STUDIES & ANALYSES	· · · · ·		
1. CONSULTING SERVICES	-	.•	•
2. OTHER	-	• .	
C. PROFESSIONAL AND MANABEMENT SERVICES BY CONTRACT		· .	
1. PROGRAM MANAGEMENT SUPPORT	• • •	-	•
A. CONSULTING SERVICES B. OTHER	:	-	-
2. POLICY REVIEW AND DEVELOPMENT	•	-	-
A. CONSULTING SERVICES B. OTHER	•.	· <b>:</b>	:
*3. SPECIFICATION DEVELOPMENT	•	-	•
A. CONSULTING SERVICES B. OTHER	V :	'	` :
4. SYSTEMS ENGINEERING	-	; <b>-</b>	•
A. CONSULTING SERVICES B. OTHER	-	-	- · •

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APPROPRIATION: MEAPONS AND TRACKED COMM	T VEHICLES,	ARHY	DATE: 01/25/02.
•	Y 1981	PY 15	62 FY 1963
S. TECHNOLOGY SHARING/ UTILIZATION	-		•
A. CONSULTING SERVICES B. OTHER	-	•	•
6. LOGISTIC SUPPORT SERVICES	•	-	•
A. CONSULTING SERVICES B. OTHER	-	:	•
7. TECHNICAL DATA COLLECTION	-	•	•
A. CONSULTING SERVICES B. OTHER	•		•
8. FUBLIC RELATIONS AND ADVERTISING	-	•	-
A. CONSULTING SERVICES B. OTHER	-	:	• •
9. OTHER PROFESSIONAL AND MANAGEMENT SERVICES BY CONTRACT	•		•
A. CONSULTING SERVICES B. OTHER	:	-	:
9. CONTRACT ENGINEERING TECHNICAL SERVICES (CETS)	192 _		62966
1. CONTRACT PLANT SERVICES	-	-	-
2. CONTRACT FIELD SERVICES	192	8	6E 966
3. FIELD SERVICE REPRESENTATIVES	<b>-</b> .		•
TOTAL	360	•	16 966

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APPROPRIATION: HEAPONS AND TRACKED	COMBAT VENICLES	. ARHY	DATE: 01/25/62
	FY 1961	FY 1962	FY 1963
E. SUPPLARY			
1. PERSONAL SERVICES CONTRACTS	• .	•	-
2. CONTRACT CONSULTING SERVICES	-	<u>.</u>	-
3. OTHER CONTRACT SERVICES	192	346	766
4. PERSONNEL APPOINTHENTS	168	. 64	•
TOTAL	360	946	966

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#### WEAPONS AND TRACKED COMBAT VEHICLES, ARMY

#### NARRATIVE JUSTIFICATION

#### CONSULTANTS, STUDIES AND ANALYSES AND MANAGEMENT SUPPORT CONTRACTS

- 1. These funds provide for independent assessment, engineering and design services for measuring the progress of prime and major subcontractors in meeting cost and performance objectives required to achieve scheduled production of Abrams Tank Ml Systems at prescribed monthly rates and in quantities specified.
- 2. Without these efforts, contractor surveillance and progress measurement would not be possible and quality products would fall short of anticipated goals.
- 3. The skills required in this area are not available in-house.

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